

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF INDIANA
SOUTH BEND DIVISION

DAYS CORPORATION,)	
)	
Plaintiff,)	
)	
vs.)	CAUSE NO. 3:17CV208-PPS/MGG
)	
LIPPERT COMPONENTS, INC. and)	
INNOVATIVE DESIGN)	
SOLUTIONS, INC.)	
)	
Defendants.)	

consolidated with _____

INNOVATIVE DESIGN)	
SOLUTIONS, INC.,)	
)	
Plaintiff,)	
)	
vs.)	CAUSE NO. 3:17CV327-PPS/MGG
)	
DAYS CORPORATION,)	
)	
Defendant.)	

OPINION AND ORDER

This is a long-running litigation over Innovative Design Solutions’ Patent No. 6,584,385 (the ‘385 Patent) for a Vehicle Leveling Assembly. IDS claims that Days Corporation is infringing the ‘385 patent. In an earlier claims construction opinion, I was asked to construe the term “analog signal” as used in Claim One of the ‘385 patent. [DE 94 at 24-27.] At the time, I accepted Days’ construction that the term “analog signal” meant “not a digital signal.” Now with the trial looming, Days requests a further construction of the broader language in Claim One where the term “analog

signal” is found. Here is the phrase from Claim 1 that Days seeks construction of in its supplemental request: “the tilt sensor being configured to provide analog signals to the controller.” It is entirely unclear why Days did not request construction of this phrase when claims construction was on the front burner in this case. But, in any event, I will construe the claim language as set forth below.

At the time of my earlier claim construction ruling, the parties “agree[d] that as used in Claim 1, ‘analog signals’ are ‘output signals of the sensor.’” [DE 94 at 24.] The dispute was over whether, as alleged infringer Days proposed, “analog signal” more particularly meant an “output signal of the sensor that is not a digital signal.” [*Id.*] I agreed with Days, but with a caveat. “Although I agree with Days that Claim 1's use of ‘analog signal’ must mean what it plainly says, I don’t agree, at least not at this stage of the proceedings, that ‘Days’ proposed construction forecloses all digitization.” [*Id.* at 26, quoting DE 60 at 28.] I found that whether the language of Claim 1 “may encompass digitization occurring between the tilt sensor and the controller is...beyond the scope of the claim construction dispute now before me.” [DE 94 at 27.]

The other shoe now drops. As noted above, Days now seeks construction of the entire phrase: “the tilt sensor being configured to provide analog signals to the controller.” Days argues that the language should be construed “to require that analog signals be provided to the controller,” in which case, according to Days, its accused leveling system would not infringe Claims 1, 7 and 12 of the ‘385 Patent. [DE 244 at 4.] By contrast, IDS would construe the disputed claim language to permit “digitization of

the electrical signals after being output by the tilt sensor and before being received at the controller.” [DE 254 at 3.] In other words, the issue hinted at previously is now squarely presented and fully briefed.

Principles of Claim Construction

In my earlier claim construction order, I set out general principles of law governing claim construction in patent disputes. [DE 94 at 2-4.] I will not repeat them all here, other than to highlight some that are most pertinent to analysis of the supplemental motion. “Claim terms are generally given their plain and ordinary meaning, which is the meaning one of ordinary skill in the art would ascribe to a term when read in the context of the claim, specification, and prosecution history.” *Apple Inc. v. MPH Technologies Oy*, 28 F.4th 254, 259 (Fed.Cir. 2022). The specification is “always highly relevant to the claim construction analysis,” and is usually dispositive as “it is the single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576, 1582. (Fed. Cir. 1996). *See also Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed.Cir. 2005)

The Plain Meaning of the Disputed Claim Term

Sometimes, a term’s ordinary meaning is equally apparent to a lay person as to a person of ordinary skill in the art, “and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314. The plain language of the disputed claim term supports Days’ position. If, as IDS contends, digitization may occur after the tilt sensor

outputs an analog signal, prior to the signal being received at the controller, that process would not accurately or sensibly be described as “provid[ing] analog signals to the controller” as Claim 1 recites.

Days points out that the nine other independent claims of the ‘385 Patent do not contain the word “analog” and “merely require the sensor to provide ‘signals’ to the controller.” [DE 244 at 4.] One maxim of claim construction is that the court should generally give meaning to all the words in the claims, and avoid “reading out” words within a claim. *In re PersonalWeb Technologies LLC*, 2021 WL 3557196, at *4 (Fed.Cir. Aug. 12, 2021); *Apple Computer, Inc. v. Articulate Sys., Inc.* 234 F.3d 14, 24-25 (Fed. Cir. 2000). In a related argument, Days invokes the doctrine of claim differentiation in support of its proposed construction of Claim 1. [DE 244 at 10.] That doctrine creates a presumption that each claim in a patent has a different scope. *CellCast Technologies, LLC v. United States*, 150 Fed.Cl. 353, 370 (Ct.Cl. 2020); *Versa Corp. v. Ag-Bag Int’l, Ltd.*, 392 F.3d 1325, 1330 (Fed.Cir. 2004). IDS’s preferred construction of the disputed term would effectively “read out” the word “analog” from Claim 1 and eviscerate what is presumed to be a purposeful distinction between Claim 1 and the other claims that refer to a “tilt sensor being configured to provide signals to the controller” without the word “analog,” such as Claim 14.

Discussion of Embodiments in the Specification

Embodiments disclosed in the specification include several with signal conversion occurring prior to the signals reaching the controller. [DE 244 at 7.] These would not be covered by the more restrictive construction of Claim 1 urged by Days here. But the presence of those embodiments does not preclude Days' interpretation of Claim 1. The specification also includes embodiments in which analog signals emitted by the sensor are provided to the controller, where digitization takes place. [*Id.*] An example is found in the specification at column 5, lines 1 through 7, describing a microcontroller having an "8-bit Analog to Digital Converter (ADC) with at least 2 channels." [DE 244-1 at 32.] The specification refers to multiple embodiments, and some may be covered by some claims of the patent while some are covered by other claims. "It is not necessary that each claim read on every embodiment." *Baran v. Medical Device Technologies, Inc.*, 616 F.3d 1309, 1316 (Fed. Cir. 2010). The Federal Circuit has "repeatedly 'cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.'" *Lowe v. ShieldMark, Inc.*, 2022 WL 636100, at *5 (Fed.Cir. Mar. 4, 2022).

Days points out multiple examples of specification language describing a structure in which signals in analog form are delivered to the controller. [DE 244 at 7-8.] Strangely, IDS cites some of this same language as though it supports its position. [DE 254 at 4-5, 7-8.] I reproduce the language below, using italics to highlight the portions that I find bolster Days' reading of the disputed claim language.

The tilt sensor 32 is configured to provide analog signals to the controller 30 representing the degree of longitudinal pitch and lateral roll of a vehicle the sensor is connected to, and the controller 30 is configured to receive and use those signals to determine vehicle attitude relative to a calibrated sensitivity factor and a user-defined zero point.
[Col. 8, ¶¶ 9-15.]

The tilt sensor 32 is used instead of limit type switches so that, instead of having the controller 30 wait for digital inputs that indicate a level state, the tilt sensor 32 continuously supplies analog values to the controller 30. The tilt sensor 32 continuously supplies analog values to allow the controller 30 to calculate a position relative to a calibrated sensitivity factor and a user defined zero point[.] [Col. 8, ¶¶ 23-29.]

The controller 30 continuously monitors analog values received from the tilt sensor.... [Col. 8, ¶¶ 66-7.]

In the zero mode, as shown in FIG. 19, the controller 30 is ready to receive a signal that will instruct it to recognize whatever analog signal values it is currently receiving from the tilt sensor 32..... [Col. 13, ¶¶ 31-33.]

[DE 244-1.] In my view, Days persuasively argues that these references within the specification support its position that Claim 1 requires the delivery to the controller of signals in analog format. As the Federal Circuit has frequently said, the specification “is the single best guide to the meaning of a disputed term.” *Vitronics Corp.*, 90 F.3d at 1582. *See also Phillips*, 415 F.3d at 1315.

The Prosecution History

“Claim language and the specification (written description) are the dominant sources of interpretation, and prosecution history can matter to a lesser degree.” *Intel Corporation v. Qualcomm Incorporated*, 21 F.4th 801, 809 (Fed.Cir. 2021). Days argues that during IDS’s prosecution of the ‘385 Patent, IDS distinguished Claim 1 against prior art

by emphasizing its requirement that the controller receive analog signals. [DE 244 at 8.] IDS's submission to the Patent and Trademark Office addressing Claim Rejections used some of the same language as later appeared in the specification as I quoted above:

"The tilt sensor is also configured to provide analog signals to the controller...The controller is also configured to receive and use those signals to determine the attitude of the structure...." [DE 244-3 at 13.] IDS went on to urge the PTO to consider what IDS described as seven "important Claim 1 limitations," which included "[a] tilt sensor configured to provide analog signals to the controller," and "[a] controller configured to receive analog signals." [DE 244-3 at 14 (emphasis in original).] As Days notes, "[w]here the patentee specifically construes a claim, emphasizing key distinctions over the prior art, prosecution history estoppel precludes the patentee from later arguing in litigation claim scope given up during prosecution." [DE 244 at 8, citing *Typhoon Touch Technologies, Inc. v. Dell, Inc.*, 659 F.3d 1376, 1381 (Fed.Cir. 2011).] "The patentee is bound by representations made and actions that were taken in order to obtain the patent." *Typhoon Touch*, 659 F.3d at 1381.

Conclusion

Having considered the plain meaning of the disputed claim term, as well as pertinent portions of the specification, and the position taken by IDS on Claim 1 during prosecution of the '385 Patent, I conclude that the phrase "the tilt sensor being configured to provide analog signals to the controller" as used in Claim 1 requires that analog signals be provided to the controller, as argued by Days.

ACCORDINGLY:

Days Corporation's Motion for Supplemental Claim Construction [DE 244] is
GRANTED as set forth herein.

SO ORDERED this 27th day of June, 2022.

/s/ Philip P. Simon
United States District Judge